

General Information

Web site for this class: First link on <http://d01b1n.lbl.gov/> .

Instructors: Prof. Mark Strovink, 437 LeConte; (LBL) 486-7087; (home, before 10) 486-8079; (UC) 642-9685. Email: strovink@lbl.gov . Web: <http://d01b1n.lbl.gov/> . Office hours: M 3:15-4:15, Th 10-11. Mr. Robin Blume-Kohout, 208 LeConte; (UC) 642-5430. Email: rbk@socrates.berkeley.edu. Office hours (to be held initially in 208 LeConte): M 1-2, W 3-4. You may also get help in the 7B Course Center, 206 LeConte.

Lectures: Tu-Th 11:10-12:30, 2 LeConte. Lecture attendance is essential, since not all of the course content can be found in the course text or handouts.

Labs: In the second week, in 262 LeConte, please enroll in one of *only* 2 special H7B lab sections [(A) #401, F 2-4; (B) #402, F 4-6]. Both sections are taught by Mr. Blume-Kohout. If you can make both of these lab (and section, see below) slots, please attempt to enroll in the earlier of these lab slots. Depending on crowding, you may be asked to move to the later lab. During "off" weeks not requiring lab apparatus, your lab section will still meet in the same room, 262 LeConte.

Discussion Sections: Beginning in the second week, please enroll in the 1 hr H7B discussion section corresponding to your H7B lab section: (A) #401, M 2-3, 385 LeConte; (B) #402, W 4-5, 343 LeConte. You are especially encouraged to attend discussion section regularly. There you will learn techniques of problem solving, with particular application to the assigned exercises.

Text (required): E.M. Purcell, **Electricity and Magnetism** (Berkeley Physics Course Volume 2), *Second Edition* (McGraw-Hill, 1985). At the beginning of the semester we will also use Chapters 22 through 26 (pp 493-592) of Resnick, Halliday and Krane, **Physics** (Volume 1), *Fourth Edition* (Wiley, 1992). The publisher has granted permission to make it possible for students to purchase a Xerox copy of these pages from Copy Central.

Problem Sets: Thirteen problem sets are assigned and graded, with solutions provided on the web and at Copy Central. They are due on Thursday at 5 PM on weeks in which there is no exam, beginning in week 2. Deposit problem sets in the box labeled "H7B" outside 208 LeConte. You are encouraged to attempt all the problems. Students who do not do them find it almost impossible to learn the material and to succeed on the examinations. Discuss these problems with your classmates as well as with the teaching staff; however, when the time comes to write up your solutions, *work independently*. Credit for collective writeups, which are easy to identify, will be divided among the collectivists. Late papers will not be graded. Your lowest problem set score will be dropped, in lieu of due date extensions for any reason.

Syllabus: H7B has one syllabus card, which is mandatory. It will be collected at the time of the midterm examination. This card pays for the experiment descriptions and instructions that you will receive from your GSI at the beginning of each laboratory. Also, we expect you also to have the opportunity to purchase at Copy Central a copy of the above mentioned 100 pages of Resnick, Halliday and Krane. Finally, copies of solutions to the problem sets will also be available for purchase at Copy Central. These solutions will also be available on the Web.

Exams: There will be one 80-minute midterm examination and one 3-hour final examination. Before confirming your enrollment in this class, please check that its final Exam Group 12 does not conflict with the Exam Group for any other class in which you are enrolled. Please verify that you will be available for the midterm examination (Th 4 Mar, 11:10-12:30), and for the final examination, W 19 May, 8-11 AM. Except for unforeseeable emergencies, it will not be possible for the midterm or final exams to be rescheduled. Passing H7B requires passing the final exam.

Grading: 25% midterm; 25% problem sets; 45% final exam; 5% lab. Grading is not "curved" -- it does not depend on your performance relative to that of your H7B classmates. Rather it is based on comparing your work to that of a generation of earlier lower division Berkeley physics students, with due allowance for educational trends.